Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	set forth in Appendix A, 40 CFR, Part 60, revised July 1, 1982. *[Reference Reg. No. 20, Section 1.5(c) dated 12/7/88].* iv. Record keeping: [*Reference Reg. No. 30 Section 6(a)(3)(i)(B) dated 12/11/00].* A. Observation records shall be maintained and made available to the Department upon request.	
5. Hazardous air pollutants: *[Reference: Permit APC-82/0073]* i. Emission standards: A. The wet gas scrubber shall reduce uncontrolled emissions of HCl by 97% by weight at all times. B. Total HCl emissions from the CCR Reformer unit shall not exceed 1.6 tons on a 12-month rolling basis. C. The wet gas scrubber shall reduce uncontrolled emissions of chlorine by 95% by weight at all times. D. Total chlorine emissions shall not exceed 0.80 tons on a 12-month rolling basis. ii. Operational limitations: A. The Owner/Operator shall operate the wet gas scrubber at all times according to the procedures of the operation, maintenance and monitoring (OMM) plan, which shall include the information specified in 40 CFR Part 63.1574(f).	iii. Compliance method: *[Reference: Permit APC-82/0073]* Compliance with the emission standards and operational limitations shall be based on monitoring/testing and recordkeeping requirements. iv. Monitoring/Testing: *[Reference: Permit APC-82/0073]* A. To demonstrate compliance with the operational limitations, the Owner/Operator shall operate a continuous monitoring system to measure the following parameters, in accordance with the requirements of 40 CFR Part 63, Subpart UUU, Table 41. 1. The pH of the scrubbing liquid exiting the scrubber; 2. The gas flow rate to the scrubber; 3. The total scrubbing liquid flow rate; 4. The differential pressure across the scrubber. B. To demonstrate compliance with operational limitations B and C during	vi. Reporting Requirements: : *[Reference: Permit APC-82/0073]* In addition to those required by Condition 3(c)(2) A. The Owner/Operator shall submit semiannual reports by January 31 and July 31 of each calendar year for the preceding semiannual period in accordance with the requirements of §63.1575(c). The report must include each instance in which an emission limit, operating standard or work practice standard is not met, or if no deviations occurred the report must contain a statement that there were no deviations during the reporting period and that no continuous monitoring system was inoperative, out of control, repaired or adjusted. An electronic copy of the report shall be sent to the Department's engineer for the refinery. vii. Certification: None in addition to those listed in

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
B. The minimum hourly average pH of the scrubbing liquid exiting the scrubber shall be 6.56. C. The minimum daily average liquid-to-gas ratio shall be 0.12. D. During periods of startup, shutdown, and malfunction, the Owner/Operator shall operate the CCR Reformer unit and wet gas scrubber in accordance with a written startup, shutdown, malfunction plan (SSMP) pursuant to 40 CFR Part 63.6(e)(3).	coke burn-off and catalyst rejuvenation, the Owner/Operator shall: 1. Collect the hourly and daily average pH monitoring data according to §63.1572; 2. Maintain the daily average pH above the operating limit established during the performance test; 3. Collect the hourly average gas flow rate and scrubbing liquid flow rate monitoring data; 4. Determine and record the hourly and daily average liquid-to-gas ratio; 5. Maintain the daily average liquid-to-gas ratio above the limit established during the performance test; and 6. Comply with the OMM plan. v. Recordkeeping: *[Reference: Permit APC-82/0073]* The Owner/Operator shall record the following information in accordance with Condition 3(b): A. A copy of each notification and report submitted pursuant to or supporting any initial Notification of Compliance Status pursuant to §63.10(b)(2)(xiv); B. Records in §63.6(e)(1)(iii) through (v) related to startup, shutdown and malfunction; and C. Records of performance tests required in §63.10(b)(2)(vii).	Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
n. Emission Units No. 45: Refinery Utilities, North & South Flares and Gas Recovery System; Spent Caustic Stripper (Emission points 45-1 and 45-2):		
1. Flare i. Operational Limitations: A. At all times, including periods of startup, shutdown, and malfunction, the Owner/Operator shall, to the extent practicable, maintain and operate the flare system including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. *[Reference: 40 CFR 60, Subpart A, §60.11(d), dated 7/1/06]* B. The flare shall be operated at all times when emissions may be vented to it. *[Reference: 40 CFR 60, Subpart A, §60.18(e), dated 7/1/06]* C. At least one flare recovery compressor shall be operational at all times, except during periods of malfunction as defined in Condition 2.e.5. D. The flares shall be designed for and operated with no visible emissions as determined by methods specified in paragraph (f) of 40 CFR 60.18 except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. *[Reference Regulation 40 CFR 60.18(c)(1) dated 7/1/06].* E. Except as provided in D above, operation of the flare shall be	ii. Compliance Method A. Compliance with Operational Limitation A will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations and review of operating and maintenance procedures, and inspection of the source. *[Reference: Regulation No. 30, Section 6(a)(3)(i)(B), dated 12/11/00 and 40 CFR 60.11(d) dated 7/1/06].* B. Compliance with the other operational standards will be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this condition. *[Reference: Regulation No. 30, Section 6(a)(3)(i)(B), dated 12/11/00].* iii. Monitoring/Testing: *[Reference: Regulation No. 30, Section 6(a)(3)(i)(B), dated 12/11/00].* A. The Owner/Operator shall continuously monitor the gas flow to the flares (i.e., the gas not recovered by the recovery compressors). B. A gas sample shall be collected from the flare header weekly and analyzed by a gas chromatograph. C. Delaware reportable quantities of pollutants in the flare emissions shall be calculated based on the flow and	v. Reporting: *[Reference: Regulation No. 30, Section 6(a)(3)(iii) dated 12/11/00]* A. All records indicating exceedances of the standards in accordance with Condition 3(c)(2)(ii)(B)(3) of this permit. vii. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
smokeless. *[Reference: Permit APC-81/0830]* F. The flare shall be operated with a flame present at all times. *[Reference: 40 CFR 60.18(c)(2), dated 7/1/06]* G. The flare flame detection device shall be in proper operation whenever the flare is in operation. *[Reference: Regulation No. 30, Section 6(a)(3)(i)(B) dated 12/11/00]*	concentrations measured from the weekly samples unless more representative process operating data can be used to provide concentrations that are different from those obtained from the daily analysis. D. Visible emissions from the flare shall be monitored as follows: 1. The Owner/Operator shall monitor the opacity from both flare stacks at all times using a video camera. The monitor for the camera shall be in plain sight in the control room at all times. 2. The Owner/Operator shall conduct daily qualitative observations of the flare using Method 22 to evaluate the presence or absence of smoke and/or visible air contaminants during a continuous fifteen (15) minute period while the flare is in operation. 3. If visible emissions are detected during any daily qualitative survey of visible emissions or is observed at any other time, the Owner/Operator shall take corrective action and/or conduct a visible emission test using 40 CFR 60, Appendix A, Reference Method 22, dated 7/11/06. The observation period is 2 hours and shall be done according to Method	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	22. *[Reference: 40 CFR 60, Subpart A, §60.18(f)(1), dated 7/1/06]* 4. The presence of a flare pilot flame shall be monitored at all times using a thermocouple or any other equivalent device to detect the presence of a flame. *[Reference: Regulation No. 30, Section 6(a)(3)(i)(B), dated 12/11/00 and 40 CFR 60.18(f)(2), dated 7/1/06]* v. Recordkeeping: The Owner/Operator shall maintain the following information in accordance with Condition 3(b). *[Reference: Regulation No. 30, Section 6(a)(3)(i)(B), dated 12/11/00]* A. Date, time and duration of the flaring event. B. Quantity of material flared. C. Calculations showing the amount of reportable quantity releases. D. Results of weekly samples. E. Daily visible emission record. F. Method 22 observations. G. Records indicating the presence of a flame during flare operation. H. Periods of time when the camera monitoring equipment is not operational.	
2. Spent Caustic Stripper: i. Emissions Standard: *[Reference: Permit: APC-95/0381]* A. There shall be no direct air contaminant emissions to the atmosphere	iii. Compliance Method: *[Reference: Regulation No. 30 Section 6(a)(3)(i)(B) dated 12/11/00]* A. Compliance with emission standard A. is based on routing the stripper overhead gases as feed to the refinery SRA only.	vi. Reporting Requirement: All records indicating exceedances of the standard in accordance with Condition 3(c)(2). vii. Certification Requirement: None in addition

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
from this unit. B. The sulfide concentration in the spent caustic shall not exceed 600 ppm (wt) and a rolling average of 200 ppm (wt) calculated on the last 30 days of actual operation. For the purpose of this condition, a day is defined as a calendar day. ii. Operational Limitation: No streams from any of the following units shall enter any part of the WWTP until they are treated by the spent caustic stripper in accordance with Emission Standard B. *[Reference: Permit: APC-95/0381]* 1. Fluid Catalytic Cracking Unit 2. Crude Unit 3. Alkylation Plant 4. Polymerization Plant 5. Ether Unit	B. Compliance with emission standard B. is based on the monitoring/testing requirements. C. Compliance with the operational limitation is based on the recordkeeping requirements. iv. Monitoring/Testing: The treated spent caustic shall be sampled and tested for sulfide concentration daily. Testing shall be conducted utilizing the CHEMetrics VACUettes sulfide test kit. An alternative test method may be substituted if approved by the Department. *[Reference: Permit: APC-95/0381]* v. Recordkeeping: The Owner/Operator shall maintain the following records: *[Reference: Regulation No. 30 Section 6(a)(3)(ii) dated 12/11/00 and Permit: APC-95/0381]* A. Log of daily sampling results B. Log indicating all periods when the spent caustic discharge to the WWTP exceeds emission standard B.	to condition 3(c)(3).
oa. Facility Wide Requirement for Fugitive VOC Emissions, i.e., Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries (40 CFR 60, Subpart GGG); National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (40 CFR Part 63 Subpart CC) Standards of Performance for Equipment Leaks of VOC in SOCMI (40 CFR 60, Subpart VV), and Regulation No. 24, Section 29, Leaks from Petroleum Refinery Equipment		

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
1. **Pumps in Light Liquids Service.** i. Operational Standards A. Each pump in light liquid service shall be monitored by the methods and procedures in accordance with (iii)(A) of this section. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, subpart VV, §60.482-2(a) dated 7/1/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* B. Leak Repair 1. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 8 of this unit. *[Reference: Regulation No. 24, Section 28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-2(c)(1) dated 7/1/00 and 40 CFR 63.648(a)(1) dated 8/18/98]* 2. A first attempt at repair shall be made no later than5 calendar days after each leak is detected. *[Reference: Regulation No. 24, Section 28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-2(c)(2) dated 7/1/00 and 40 CFR 63.648(a)(1) dated 8/18/98]* C. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (A) of this section, provided the following requirements are met: 1. Each dual mechanical seal system is— a. Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or b. Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected	ii. Compliance Methods Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. *[Reference Regulation No. 30 Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing A. Periodic Monitoring 1. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60, Subpart VV, §60.485(b), dated 7/1/00, except as given in paragraphs (i)(C), (i)(D), and (i)(E) of this section. 2. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60,Subpart VV, §60.482-2(a), dated 7/1/00]* ii. Detection of Leaks 1. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected for existing pumps as defined in 40 CFR 63.640. If an instrument reading of 2,000 ppm or greater is measured, a leak is detected for new pumps as defined in 40 CFR 63.640. *[Reference: Regulation No. 24, Section 28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-2 dated 7/1/00 and 40 CFR 63.648(a)(1) dated 8/18/98]*	v. Reporting A. All exceedances in accordance with Condition 3(c)(2) of this permit. B. Other reporting requirements are covered under Section 13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
by a closed vent system to a control device that complies with the requirements of Section 9 of this unit; or, c. Equipped with a system that purges the barrier fluid into process stream with zero VOC emissions to the atmosphere. 2. The barrier fluid system is in heavy liquid service or is not in VOC service. 3. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. 4. Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals. 5. a. Each sensor as described in paragraph (3) of this section is checked daily or is equipped with an audible alarm, and b. The Owner/Operator determines, based on design considerations and operation experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. 6. a. If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (C)(5)(b), a leak is detected.	2. If there are indications of liquids dripping from the pump seal, a leak is detected. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60,Subpart VV, §60.482-2(b), dated 7/1/00]* iv. Recordkeeping None in addition to the requirements of Section 12 of this unit.	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
b. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 9 of this unit. c. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. *[Reference: Regulation No. 24, Section 28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-2(d), dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98].* D. Any pump that is designed for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (i)(A), (i)(B), (i)(C), and (iii) of this section if the pump: 1. Has no externally actuated shaft penetrating the pump housing. 2. Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR 60, Subpart VV, §60.485(c), dated 7/1/00, and 3. Is tested for compliance with paragraph (D)(2) initially upon designation, annually, and at other times required by the		

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
Department. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-2(e) dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98].* E. If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system, it is exempt from this section. [*Reference: Regulation No. 24, Section29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-2(f) dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98].* F. Any pump that is designated as an unsafe-to-monitor pump is exempt from the Monitoring/Testing requirements of this section if: 1. The Owner/Operator demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to immediate danger as a consequence if complying with part (iii)(A) of this section; and 2. The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in part (iii)(B) of this		

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
section if a leak is detected. *[Reference: Regulation 24, Section 29 dated 11/29/94; 40 CFR 60 Subpart VV §60.482-2(g) dated 12/14/2000 and §63.648(a)(1) dated 8/18/98].*		
2. Compressors. i. Operational Standards A. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR 60.482-91(c) and Operational Standards (E) and (F) of this section. *[Reference: Regulation No. 24, Section 28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-3(a) dated 7/1/00 and 40 CFR 63.468(a)(1) dated 8/18/98]* B. Each compressor seal system as required in paragraph (A) shall be: 1. Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or 2. Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of Section 9 of this unit; or 3. Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-3(b) dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98]* C. The barrier fluid system shall be in heavy	ii. Compliance Method Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. *[Reference: Regulation No. 30, Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing A. Each barrier fluid system as described in paragraph (i)(A) of this unit shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. *[Reference: Regulation No. 24, Section 28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-3(d), dated 7/1/00]* B. 1. Each sensor as required in paragraph (A) shall be checked daily or shall be equipped with an audible alarm. 2. The Owner/Operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. *[Reference: Regulation No.2 4, Section28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-3(e), dated 7/1/00]* C. If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (B)(2), a leak	v. Reporting A. All exceedances in accordance with Condition 3 (c)(2) of this permit. B. Other reporting requirements are covered under Section 13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
liquid service or shall not be in VOC service. *[Reference: Regulation No. 24, Section29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-3(c) dated 7/1/00 and 40 CFR 63.468(a)(1) dated 8/18/98]* D. 1. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 8 of this unit. 2. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. *[Reference: Regulation No.24, Section 28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-3(g) dated 7/1/00 and 40 CFR 63.468(a)(1) dated 8/18/98].* E. A compressor is exempt from the requirements of Operational Standards (A) and (B) of this section, if it is equipped with a closed vent system to capture and transport any leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of Section 9 of this unit. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-3(h) dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98]* F. Any compressor that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of this section if the compressor: 1. Is demonstrated to be operating with no	is detected. *[Reference: Regulation No. 24, Section28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-3(f), dated 7/1/00]* iv. Recordkeeping None in addition to the requirements of Section 12 of this unit.	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR 60, Subpart VV, §60.485(c), dated 7/1/00. 2. Is tested for compliance with Operational Standard (F)(1) initially upon designation, annually, and at other times requested by the Department. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-3(i) dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98].* G. Any existing reciprocating compressor in a process unit which becomes an affected facility is exempt from this section provided the Owner/Operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of this section. *[Reference: 40 CFR 60, Subpart VV, §60.482-3(j) dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98].* H. Compressors in hydrogen service are exempt from the requirements of this section if the Owner/Operator demonstrates that a compressor is in hydrogen service. *[Reference: 40 CFR 60, Subpart GGG, 60.593(b)(1) dated 7/1/2000].* I. Each compressor is presumed to be in hydrogen service unless the Owner/Operator demonstrates that it is not in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen		

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
concentration can be reasonably expected to exceed 50% by volume. *[Reference: 40 CFR 60.593(b)(1) & (2) dated 10/17/2000 and 40 CFR 63.648(g) dated 8/18/98].*		
3. **Pressure Relief Devices in Gas/vapor Service.** i. Operational Standards A. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm, above background, as determined by the methods specified in 40 CFR 60, Subpart VV, §60.485(c), dated 7/1/00. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-4(a) dated 7/1/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* B. Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in Section 9 of this unit is exempted from the requirements of paragraphs (i)(A) and (iii) of this section *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-4(c) dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98.]* C. 1. Any pressure relief device that equipped with a rupture disk	ii. Compliance Method Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. . *[Reference: Regulation No. 30, Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing A. After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in Section 8 of this unit. *[Reference: Regulation No. 24, Section 28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-4(b)(1), dated 7/1/00]* B. No later than 5 calendar days after a pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR 60, Subpart VV, §60.485©, dated 7/1/00. *[Reference: Regulation No. 24, Section 28, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-4(b)(2), dated 7/1/00]*	v. Reporting A. All exceedances in accordance with Condition 3(c)(2) of this permit. B. Other reporting requirements are covered under Secton13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
upstream of the pressure relief device is exempt from the requirements in (i)(C)(2) below. 2. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482-9. *[Reference 40 CFR 60, Subpart VV, §60.482-4(d) dated 12/14/2000].*	iv. Recordkeeping None in addition to the requirements of Section 12 of this unit.	
4. **Sampling Connection Systems.** i. Operational Standards. A. Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in the provisions for determining an equivalent means of limitation. Gasses displaced during filling of the sample container are not required to be collected or captured. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-5(a) dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98.]* B. Each closed-purge, closed-loop, or closed vent system as required in paragraph (A) of this section shall comply with the following requirements: 1. Return the purged process fluid directly to the process line; or 2. Collect and recycle the purged	ii. Compliance Method Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. [Reference Regulation No. 30 Section 6(a)(3) dated 11/15/93] iii. Monitoring/Testing None. iv. Recordkeeping None in addition to the requirements of Section 12 of this unit.	v. Reporting A. All exceedances in accordance with Condition 3(c)(2) of this permit. B. Other reporting requirements are covered under Section 13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
process fluid to a process; or 3. Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of Section 9 of this unit. 4. Collect, store, and transport the purged process fluid to any of the following systems: 1. A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operate in compliance with the provision of 40 CFR part 63, subpart G, application to Group 1 wastewater streams; b. A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or 3. A facility permitted, licensed, or registered by the State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261. *[Reference: Regulation No. 24, Section 28,dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-5(b) dated 7/1/00 and 40 CFR 63.468(a)(1) dated 8/18/98].* 3. In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (A) and (B) of this section. *[Reference: Regulation*		

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-5(c) dated 12/14/2000 and 40 CFR 63.648(a)(1) dated 8/18/98].		
5. **Open-ended Valves or Lines.** i. Operational Standards A. 1. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. 2. The cap, blind flange, plug or second valve shall seal the open end at all times except during operations requiring process fluid flow throughout he open-ended valve or line. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* B. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second value is closed. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]* C. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (A) at all other times. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR*	ii. Compliance Method: Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. *[Reference Regulation No. 30 Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing: None iv. Recordkeeping None in addition to the requirements of Section 12 of this unit.	v. Reporting A. All exceedances in accordance with Condition 3(c)(2) of this permit. B. Other reporting requirements are covered under Section 13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
63.648(a)(1) dated 8/18/98] D. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (i)(A), (B), and (C) of this section. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]* E. Open-ended valves or lines containing materials which would automatically polymerize or would present an explosion, serious over pressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (i)(A) through (C) of this section are exempt from the requirements of paragraphs (i)(A) through (C) of this section. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated* 8/18/98]		
6. **Valves in Gas/vapor Service and in Light Liquid Service.** i. Operational Standards A. Each valve shall be monitored as given in section (iii) of this unit and shall comply with Operational Standards (B) through (D), except as provided in Operational Standards (E) and (F) and Sections 10 and 11 of this unit. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]*	ii. Compliance Method Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. *[Reference Regulation No. 30 Section 6(a)(3) dated11/15/93].* iii. Monitoring/Testing A. Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60 Subpart VV, §60.485(b), dated	v. Reporting A. All exceedances in accordance with Condition 3(c)(2) of this permit. B. Other reporting requirements are covered under Section 13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
B. 1. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Section 8 of this unit. 2. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]* 3. First attempts at repair include, but are not limited to, the following best practices where practicable: 1. Tightening of bonnet bolts; 2. Replacement of bonnet bolts; 3. Tightening of packing gland nuts; 4. Injection of lubricant into lubricated packing. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]* D. Any valve that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Operational Standard (A) of this section if the valve: 1. Has no external actuating mechanism in contact with the process fluid, 2. Is operated with emissions less than 500 ppm above background	7/1/00. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00]* B. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected for existing valves as defined in 40 CFR 63.640. If an instrument reading of 500 ppm or greater is measured, a leak is detected for new valves as defined in 40 CFR 63.640. *[Reference: Regulation No. 24, Section 29, dated 11/29/9, 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648]* C. 1. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. 2. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00]* iv. Recordkeeping None in addition to the requirements of Section 12 of this unit.	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
as determined by the method specified in 40 CFR 60, Subpart VV, § 60.485(c), dated 7/1/00, and 3. Is tested for compliance with paragraph (D)(2) initially upon designation, annually, and at other times requested by the Department. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]* E. Any valve that is designated as an unsafe-to-monitor valve is exempt from the requirements of Operational Standard (A) if: 1. The Owner/Operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (A), and 2. The Owner/Operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]* F. Any valve that is designated as a difficult-to-monitor valve is exempt from the requirements of Operational Standard (A) if:		

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
1. The Owner/Operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface. 2. The Owner/Operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and 3. The Owner/Operator follows a written plan that requires monitoring of the valve at least once per calendar year. *[Reference: Regulation No. 24, Section 29, dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-6(a) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]*		
7. Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges Connectors. i. Operational Standards A. If evidence of a potential leak is found by visual, audible, olfactory, or other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the Owner/Operator shall follow either one of the monitoring requirements in part (iii)(A) of this section. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-8(a) dated 12/14/2000].*	ii. Compliance Method Compliance with operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. *[Reference Regulation No. 30 Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing A. 1. The Owner/Operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485(b) and comply with the requirements of paragraphs (B) through (D) below *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-8(a0(1), dated 12/14/00].* 2. The Owner/Operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.	vi. Reporting A. All exceedances in accordance with Condition 3(c)(2) of this permit. B. Other reporting requirements are covered under Section 13 of this unit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-8(a)(2), dated 12/14/00]. B. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-8(a)(2), dated 12/14/00].* C. 1. When a leak is detected it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in §60.482-9. 2. The first attempt at repair shall be made no later than 5 calendar days after each leak is detected. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-8(a)(2), dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* iv. First attempts at repair include, but are not limited to the best practices described under Section 6(i)(C) of this unit. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-8(a)(2), dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* v. Recordkeeping None in addition to the requirement of Section 12 of this unit.	
8. Delay of Repair i. Operational Standard A. Delay of repair of equipment for which leaks have been detected will be allowed if	ii. Compliance Method Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and	v. Reporting A. All exceedances in accordance with Condition 3(c)(2) of this permit. B. Other reporting requirements are covered

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-9(a), dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* B. Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-8(a)(2), dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* C. Delay of repair for valves will be allowed if: 1. The Owner/Operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and 2. When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Section 9 of this unit. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-8(a)(2), dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* D. Delay of repair for pumps will be allowed if: 1. Repair requires the use of a dual mechanical seal system that includes a	recordkeeping requirements of this section. *[Reference Regulation No. 30 Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing None iv. Recordkeeping None in addition to the requirements of Section 12 of this unit.	under Section 13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
barrier fluid system, and 2. Repair is completed as soon as practicable, but not later than 6 months after the leak was detected. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-8(a)(2), dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* E. Delay or repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-9(e)(2), dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].*		
9. Closed Vent Systems and Control Devices. i. Operational Standards A. Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater or to an exit concentration of 20 ppmv, whichever is less stringent. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(b) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* B. Enclosed combustion devices shall be	ii. Compliance Method Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. *[Reference Regulation No. 30 Section 6(a)(3) dated 12/11/00]* iii. Monitoring/Testing A. Control devices used to comply with the provisions of this unit shall be monitored to ensure that they are operated and maintained in conformance with their	Reporting A. All exceedances in accordance with Condition 3(c)(2) of this permit. B. Other reporting requirements are covered under Section 13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater or to an exit concentration of 20 ppmv dry corrected to 3% oxygen, whichever is less stringent, or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816°C. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(c) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* C. Flares used to comply with this subpart shall comply with the requirements of 40 CFR 60, Subpart A, §60.18, dated 7/1/00 and Unit 1 of this Table. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(d) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* D. Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (E) of this section. 1. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. 2. Repair shall be completed no later than 15 calendar days after the leak is detected. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(g) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].*	designs. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(e) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* B. Except as provided in paragraphs (C) through (E) below, each closed vent system shall be inspected according to the procedures: 1. If the vapor collection system or closed vent system is constructed of hard-piping, the Owner/Operator shall comply with the requirements specified in paragraphs (B)(1)(a) and (B)(1)(b) of this section: i. Conduct an initial inspection according to the procedures 40 CFR 60, Subpart VV, §60.485(b), dated 7/1/00; and ii. Conduct annual visual inspections for visible, audible, or olfactory indications of leaks. 2. If the vapor collection system or clod vent system is constructed of ductwork, the Owner/Operator shall: i. Conduct an initial inspection according to the procedures in 40 CFR 60, Subpart VV, §60.485(b), dated 7/1/00); and ii. Conduct annual inspections according to the procedures in Sec. 60.485(b). *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(f), dated 12/14/00]*	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
E. Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the Owner/Operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(h) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].* F. Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(m) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98].*	C. If a vapor collection system or clod vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (B)(1)(a) and (B)(2) of this section. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482108(i), dated 12/14/00].* D. Any parts of the closed vent system that are designated as unsafe to inspect are exempt from the inspection requirements of paragraphs (B)(1)(a) and (B)(2) of this section if they comply with the requirements specified in paragraphs (D)(1)(a) and (D)(2) of this section: 1. The Owner/Operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (B)(1)(a) or (B)(2) of this section; and 2. The Owner/Operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(j) dated 12/14/00].* E. Any parts of the closed vent system that are designated as difficult to inspect are exempt from the inspection requirements of paragraphs (B)(1)(a) or (B)(2) of this section if they comply	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	with the requirements specified in paragraphs (E)(1) through (E)(3) of this section: 1. The Owner/Operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and 2. The owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and 3. The Owner/Operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(k) dated 12/14/00].* iv. Recordkeeping In addition to the records required by Section 12 of this unit, the Owner/Operator shall record the following and keep it for at least five years. A. Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment. B. Identification of all parts of the closed vent	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment. C. For each inspection conducted in accordance with §60.485(b) dated 10/17/2000 during which a leak is detected, a record of the information specified in 40 CFR 60, Subpart VV, §60.486(c), dated 12/14/00. D. For each inspection during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. E. For each visual inspection conducted in accordance with paragraph (B)(1)(b) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.482-10(l) dated 12/14/00 and 40 CFR 63.648(a)(l) dated 8/18/98].*	
10. Alternative Standards for Valves – Allowable Percentage of Valves Leaking. i. Operational Standards A. The Owner/Operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.483-1(a)*	ii. Compliance Method Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. *[Reference Regulation No. 30 Section 6(a)(3) dated 11/15/93]*	v. Reporting A. The Owner/Operator must notify the Department that the Owner/Operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard as specified in section 13(c)(D). *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40*

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98] B. Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.483-1(d) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]*	iii. Monitoring/Testing A. A performance test as specified in paragraph (C) of this section shall be conducted initially upon designation, annually, and at other times requested by the Department. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.483-1(b)(2) dated 12/14/00]* B. If a valve leak is detected, it shall be repaired in accordance with Section 6(B) and (C) of this unit. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.483-1(b)(3) dated 12/14/00].* C. Performance tests shall be conducted in the following manner: 1. All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in 40 CFR 60, Subpart VV, §60.485(b), dated 7/1/00. 2. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. 3. The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.483-1(c) dated 12/14/00 and 40 CFR 63.648(a)(1) dated 8/18/98]* iv. Recordkeeping	*CFR 60, Subpart VV, §60.483-1 dated 12/14/00]* . vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	None in addition to the requirements of Section 12 of this unit.	
11. Alternative Standards for Valves-Skip Period Leak Detection and Repair. i. The Owner/Operator may elect to comply with one of the alternative monitoring frequencies specified in paragraphs (iii)(B) and (iii)(C) of this section. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.483-2(a) dated 12/14/00].*	ii. Compliance Method Compliance with the operational standards of this condition shall be demonstrated in accordance with the monitoring/testing and recordkeeping requirements of this section. *[Reference Regulation No. 30 Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing A. A Owner/Operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in Section 6 of this unit. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.483-2(b) dated 12/14/00].* B. After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.483-2(b)(2), dated 12/14/00].* C. After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.483-*	v. Reporting A. A Owner/Operator must notify the Department before implementing one of the alternative work practices as specified in section 13(v)(D) of this unit. *[Reference: Regulation No. 24, Section 29 dated 11/29/94 and 40 CFR 60, Subpart VV, §60.483-2(a) dated 12/14/00].* B. Other reporting requirements as specified in Section 13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	2(b)(3), dated 12/14/00] D. If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in Section 6 of this unit but can again elect to use this section. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.483-2(b)(4), dated 12/14/00]* E. The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.483-2(b)(5), dated 12/14/00]* iv. Recordkeeping A. The Owner/Operator must keep a record of the percent of valves found leaking during each leak detection period. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.483-2(b)(6), dated 12/14/00]* B. The Owner/Operator shall keep all the other records listed in Section 12 of this unit.	
12. Recordkeeping requirements: 1. The Owner/Operator shall comply with the recordkeeping requirements of this section. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.486(a), dated 12/14/00]*	ii. Compliance Method Compliance with this section will be accomplished by maintaining the records required by section (iv). iii. Monitoring/Testing None in addition to the requirements of the other sections of this unit.	v. Reporting None in addition to that required by Section 13 of this unit. vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	iv. Recordkeeping i. When each leak is detected, as specified in Sections 1, 2, 6, 7, and 11 of this unit, the following requirements apply: i. A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. ii. The identification on a valve may be removed after it has been monitored for 2 successive months and no leak has been detected during those 2 months. iii. The identification on equipment except for a valve, may be removed after it has been repaired. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.486(b), dated 12/14/00]* ii. When each leak is detected, as specified in Sections 1, 2, 6, 7 and 11 of this unit, the following information shall be recorded in a log and shall be kept for 5 years in a readily accessible location: i. The instrument and operator identification numbers and the equipment identification number. ii. The date the leak was detected and the dates of each attempt to repair the leak. iii. Repair methods applied in each attempt to repair the leak. iv. "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR 60,	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	Subpart VV, §60.485(a), dated 7/1/00 after each repair attempt is equal to or greater than 10,000 ppm. v. "Repair delayed" and the reasons for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. vi. The signature of the Owner/Operator (or designate) whose decision it was that repair could not be effected without a process shutdown. vii. The expected date of successful repair of the leak if a leak is not repaired within 15 days. viii. Dates of process unit shutdown that occur while the equipment is unrepaired. ix. The date of successful repair of the leak. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.486(c), dated 12/14/00]* C. The following information pertaining to the design requirements for closed vent systems and control devices described in Section 9 of this unit shall be recorded and kept in a readily accessible location: 1. Detailed schematics, design specifications, and piping and instrumentation diagrams. 2. The dates and description of any changes in the design specifications. 3. A description of the parameter or parameters monitored, as required in 40	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	CFR 60, Subpart VV, §60.482-10(e), dated 12/14/00, to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring. 4. Periods when the closed vent systems and control devices required in Sections 1-4 of this unit are not operated as designed, including periods when a flare pilot light does not have a flame. 5. Dates of startups and shutdowns of the closed vent systems and control devices required in Sections 1-4 of this unit. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.486(d), dated 12/14/00]* D. The following information pertaining to all equipment subject to the requirements in Sections 1-9 of this unit shall be recorded in a log that is kept in a readily accessible location: 1. A list of identification numbers for equipment subject to the requirements of this subpart. 2. a. A list of identification numbers for equipment that are designed for no detectable emissions under the provisions of Sections 1(i)(D), 2(i)(F) and 6(i)(D) of this unit. b. The designation of equipment as subject to the requirements of Sections 1(i)(D), 2(i)(F) and 6(i)(D)	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	of this unit shall be signed. 3. A list of equipment identification numbers for pressure relief devices required to comply with Section 3 of this unit. 4. a. The dates of each compliance test as required in Section 1(i)(D), 2(i)(F), 3, and 6(i)(D) of this unit. b. The background level measured during each compliance test. c. The maximum instrument reading measured at the equipment during each compliance test. 5. A list of identification numbers for equipment in vacuum service. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.486(e), dated 12/14/00]* E. The following information pertaining to all valves subject to the requirements of Sections 6(i)(E) and (F) of this unit and to all pumps subject to Section 1(i)(F) of this unit shall be recorded in a log that is kept in a readily accessible location: 1. A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve and pump stating why the valve is unsafe-to-monitor, and the plan for monitoring each valve and pump. 2. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	monitor, and the schedule for monitoring each valve. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.486(f), dated 12/14/00]* F. The following information shall be recorded for valves complying with Section 1 of this unit: 1. A schedule of monitoring. 2. The percent of valves found leaking during each monitoring period. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.486(g), dated 12/14/00]* G. The following information shall be recorded in a log that is kept in a readily accessible location: 1. Design criterion required in Sections 1(i)(C)(5) and 2(iii)(B)(2) of this unit and explanation of the design criterion; and 2. Any changes to this criterion and the reasons for the changes. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.486(h), dated 12/14/00]* H. Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location. *[Reference: Regulation No. 24, Section 29 dated 11/29/04 and 40 CFR 60, Subpart VV, §60.486(j), dated 7/1/00].*	
13. Reporting requirements: i. Standards: The Owner/Operator shall submit reports as given	ii. Compliance Method Compliance with this condition shall be demonstrated in accordance with the	v. Reporting A. The Owner/Operator shall submit semiannual reports to the Department on

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
in section (v).	reporting requirements of this section. *[Reference: Regulation No. 30 Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing None. iv. Recordkeeping None in addition to the requirements of Section 12 of this unit.	February 1 and July 1 of each year. [Reference: 40 CFR 60, Subpart VV, §60.487(a), dated 12/14/00]. B. The initial semiannual report to the following Department shall include the following information: 1. Process unit identification. 2. Number of valves subject to the requirements of Section 6 of this unit, excluding those valves designated for no detectable emissions. 3. Number of pumps subject to the requirements of Section 1 of this unit, excluding those pumps designated for no detectable emissions and those pumps complying with Section 2(i)(E) of this unit. 4. Number of compressors subject to the requirements of Section 2 of this unit, excluding those compressors designated for no detectable emissions and those compressors complying with Section 2(i)(G). *[Reference: 40 CFR 60, Subpart VV, §60.487(n), dated 12/14/00].* C. All semiannual reports to the Department shall include the following information: 1. Process unit identification. 2. For each month during the semiannual reporting period, a. Number of valves for which leaks were detected as described in Section 6(iii)(B) or Section 11 of this unit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
		b. Number of valves for which leaks were not repaired as required in Section 6(i)(B)(1) of this unit. c. Number of pumps for which leaks were detected as described in Section 1(iii)(B)(1) and 1(i)(C)(6)(a) of this unit. d. Number of pumps for which leaks were not repaired as required in Section 1(i)(B)(1) and 1(i)(C)(6)(b) of this unit. e. Number of compressors for which leaks were detected as described in Section 2(iii)(C) of this unit. f. Number of compressors for which leaks were repaired as required in Section 2(i)(D)(1) of this unit; and g. The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible. 3. Dates of process unit shutdowns which occurred within the semiannual reporting period. 4. Revisions to items reported according to paragraph (2) if changes have occurred since the initial report or subsequent revisions to the initial report. *[Reference: 40 CFR 60, Subpart VV, §60.487(c), dated 12/14/00].* D. An owner or operator electing to comply with the provisions of Sections 10 and 11 of unit shall notify the Department of the alternative standard selected 90 days before

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
		implementing either of the provisions. *[Reference: 40 CFR 60, Subpart VV, §60.487(d), dated 12/14/00].* vi. Compliance Certification None in addition to that required by Condition 3(c)(3) of this permit.
ob. Facility wide requirements for all emission units listed in condition 1 of this permit and any insignificant activity listed in Regulation 30, Appendix A operated by the Owner/Operator or included in the permit application		
1. **Visible Emissions Standard:** i. The Owner/Operator shall not cause or allow the emission of visible air contaminants and/or smoke from any emission unit, the shade or appearance of which is greater than twenty (20) percent opacity for an aggregate of more than three (3) minutes in any one (1) hour or more than fifteen (15) minutes in any twenty-four (24) hour period. *[Reference Regulation No. 14 Section 2.1 dated 7/17/84]*	ii. Compliance Method: Except for units where compliance with the visible emission standard is required to be demonstrated by an alternative monitoring plan., compliance with the emission standard of this condition shall be demonstrated in accordance with Subsection 1.5(c) of Regulation No. 20 and the recordkeeping requirements of this condition. *[Reference No. 14 Section 4.1 dated 7/17/84 and Regulation No. 30 Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing: A. In accordance with Regulation No. 20 Section 1.5, conduct visual observations at fifteen second intervals for a period of not less than one hour except that the observations may be discontinued whenever a violation of the standard is recorded. The additional procedures, qualification and testing to be used for visually determining the opacity shall be those specified in Section 2 and 3	v. Reporting Requirement: All records indicating exceedances of the standard in accordance with Condition 3(c)(2) of this permit. vi. Certification Requirement: None in addition to Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	(except for Section 2.5 and the second sentence of Section 2.4) of reference Method 9 set forth in Appendix A, 40 CFR Part 60 revised July 1, 1982. *[Reference Regulation No. 20 Section 1.5(c) dated 12/7/88]* B. The Owner/Operator shall conduct weekly qualitative observations to determine the presence of any visible emissions. 1. If visible emissions are observed, the Owner/Operator shall take corrective actions and/or determine compliance by conducting a visible observation in accordance with Paragraph (A) above. 2. If no visible emissions are observed or are within permitted limits, no further action is required. *[Reference: Reg. No. 30 Section 6(a)(3) dated 11/15/93].* iv. Record Keeping: Observation records shall be maintained in accordance with Condition 3(b). *[Reference Regulation No. 30 Section 6(a)(3)(i)(B) dated 11/15/93]*	
2. Odor – State Enforceable Only i. The Owner/Operator shall not cause or allow the emission of an odorous air contaminant such as to cause a condition of air pollution. *[Reference Regulation No. 19 Section 2.1 dated 2/1/81]*	ii. Compliance Method: Compliance with the emission standard of this condition shall be demonstrated in accordance with the monitoring/testing and record keeping requirements of this condition. *[Reference Regulation No. 30 Section 6(a)(3) dated 11/15/93]* iii. Monitoring/Testing: Includes but is not limited to scentometer tests, air quality monitoring, and affidavits from affected citizens and investigators. *[Reference Regulation No. 19 Section 1.2 dated 2/1/81]* iv. Recordkeeping: Records of all monitoring/testing shall be maintained in	v. Reporting Requirement: All records indicating exceedances of the standard in accordance with Condition 3(c)(2) of this permit. vi. Certification Requirement: None in addition to Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
	accordance with Condition 3(b). *[Reference Regulation No. 30 Section 6(a)(3)(i)(B) dated 11/15/93]*	
3. Petroleum Refinery Sources i. Emission Standards: With the exception of segregated storm water runoff drain systems and non-contact cooling water systems, the Owner/Operator shall comply with the following standards for process unit turnarounds: 1. Process Unit Turnarounds: The owner or operator of a petroleum refinery shall provide for the following during process unit turnaround: 1. Depressurization venting of the process unit or vessel to a vapor recovery system, flare, or firebox. 2. No emission of VOC from a process unit or vessel until its internal pressure is 136 kiloPascals (kPa)(19.7 pounds per square inch atmospheric [psia]) or less. *[Reference Regulation No. 24 Section 28(c) dated 11/11/93].*	ii. Compliance Method: Compliance shall be demonstrated through adherence to the applicable monitoring/testing and record keeping requirements of this section. *[Reference Regulation No. 30 Section 6(a)(3)(i)(B) dated 11/15/93].* iii. Monitoring/Testing: The Owner/Operator shall: A. Monitor the internal pressure of each process unit and vessel immediately prior to venting to the atmosphere. *[Reference Regulation No. 24 Section 28(c) and (d) dated 11/15/93].* iii. Record Keeping: The Owner/Operator shall maintain the records of the following items in accordance with Condition 3(b): A. Date of every process unit or vessel turnaround. B. The internal pressure of the process unit or vessel immediately prior to venting to the atmosphere. *[Reference Regulation No. 24 Section 28(c) and (d) dated 11/11/93].*	iii. Record keeping Requirement: None in addition to condition 3(c)(2) of this permit. iv. Certification Requirement: None in addition to condition 3(c)(3) of this permit.
4. General conditions applicable to all pollutants: i. Operational Limitations: A. At all times, including periods of startup, shutdown, and malfunction, the owner or operator shall, to the extent practicable, maintain and operate the facility including associated air	ii. Compliance Methodology: *[Reference Regulation No. 30 Section 6(a)(3)(i)(B) dated 12/11/00]* A. Compliance with operational limitations A and B, shall be based on whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring	v. Reporting Requirement: None in addition to Condition 3(c)(2) of this permit. vi. Certification Requirement: None in addition to Condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. B. All structural and mechanical components shall be maintained in proper operating condition.	results, opacity observations, review of operating and maintenance procedures, and inspection of the source. iii. Monitoring/Testing: None proposed. iv. Record Keeping: None in addition to Condition 3.b.2. of this permit.	
5. Sulfur Dioxide i. Operational Limitation: The Owner/Operator shall not purchase for use and shall not use any fuel having a sulfur content greater than 1.0 percent. *[Reference Regulation No. 8, Section 2.1 dated 5/9/85]*	ii. Compliance Methodology: Compliance with the operational limitation shall be based on the fuel type and quality. *[Reference: Regulation No. 30 Section 6(a)(3)(i)(B) dated 12/11/00]* iii. Monitoring/Testing: None proposed. iv. Record Keeping: The Owner/Operator shall maintain a record of the type of fuel purchased for use or used in any emission unit. *[Reference: Regulation No. 30 Section 6(a)(3)(i)(B) dated 12/11/00]*	v. Reporting Requirement: None in addition to Condition 3(c)(2) of this permit. vi. Certification Requirement: None in addition to Condition 3(c)(3) of this permit.
6. Volatile Organic Compounds Handling, Storage and Disposal of VOCs. i. Work Practice Standards: A. The Owner/Operator shall not cause, allow, or permit the disposal of more than eleven (11) pounds of a Volatile Organic Compound (VOC), or of any materials containing more than eleven (11) pounds of any VOCs, in any one (1) day, in a manner that would permit the evaporation of VOC into the ambient air. This includes but is not limited to the disposal of VOC from	ii. Compliance Method: Compliance shall be demonstrated by adherence with the VOC handling work practices and by providing appropriate training and posting of instructions, and record keeping for storage, use and disposal of VOCs. *[Reference Regulation No. 30 Section 6(a)(3) dated 12/11/00]* iii. Monitoring/Testing: Monitor employee training records on an annual basis and update records as needed. *[Reference Regulation No. 30 Section 6(a)(3)(i)(B) dated 12/11/00]*	v. Record Keeping Requirement: None in addition to condition 3(c)(2) of this permit. vi. Certification Requirement: None in addition to condition 3(c)(3) of this permit.

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
any VOC control devices. This provision does not apply to: 1. Any VOC or material containing VOC emitted from a regulated entity that is subject to a VOC standard under Regulation No. 24. 2. Any VOC or material containing VOCs used during process maintenance turnarounds for cleaning purposes, provided that the provisions of paragraph (B), (C), and (D) of this condition are followed. 3. Waste paint (sludge) handling systems, water treatment systems, and other similar operations at coating facilities using complying coatings. B. No owner or operator of a facility subject to this regulation shall use open containers for the storage or disposal of cloth or paper impregnated with VOCs that are used for surface preparation, cleanup, or coating removal. Containers for the storage or disposal of cloth or paper impregnated with VOCs shall be kept closed, except when adding or removing material. C. No owner or operator of a facility subject to this regulation shall store in open containers spent or fresh VOC to	iv. Recordkeeping: The Owner/Operator shall keep a record of postings, and employee training related to these work practice standards and handling, storage, and disposal of VOCs. *[Reference Regulation No. 30 Section 6(a)(3)(i)(B) dated 12/11/00]*	

Condition 3 – Table 1 (Specific Requirements)

Emission Limitation(s)/Standard(s) and/or Operational Limitation(s)/Standard(s)	Compliance Determination Methodology (Monitoring/Testing, QA/QC Procedures (as applicable) and Record Keeping	Reporting/Compliance Certification
be used for surface preparation, cleanup or coating removal. Containers for the storage of spent or fresh VOCs shall be kept closed, except when adding or removing material. D. No owner or operator shall use VOC for the cleanup of spray equipment unless equipment is used to collect the cleaning compounds and to minimize their evaporation to the atmosphere. *[Reference Regulation No. 24, Section 8 dated 11/29/94]*		
7. **Insignificant Emissions Units** i. The facility is allowed to operate the insignificant emissions units listed in Attachment "C" of this permit. *[Reference: Reg. No. 30 Section 6(a)(1) dated 12/11/00].*	ii. Compliance Method: Compliance shall be based on following good air pollution control practices, the monitoring/testing and recordkeeping requirements. *[Reference Regulation No. 30 Section 6(a)(3) dated 12/11/00]* iii. Monitoring/Testing: None in addition to Condition 3(b). *[Reference Regulation No. 30 Section 6(a)(3)(i)(B) dated 12/11/00]* iv. Recordkeeping: None in addition to Condition 3(b). *[Reference Regulation No. 30 Section 6(a)(3)(i)(B) dated 12/11/00]*	v. Record Keeping Requirement: None in addition to condition 3(c)(2) of this permit. vi. Certification Requirement: None in addition to condition 3(c)(3) of this permit.

Condition 4. Operational Flexibility

a. In addition to the operational flexibility specifically provided in the terms and conditions detailed in Condition 3 – Table 1 of this permit, the Owner/Operator is authorized to make any change within the facility which contravenes the terms and conditions of this permit without a permit revision if the change:

1. Is not a modification or otherwise prohibited under any provision of Title I of the Act or the State Implementation Plan (SIP); and *[Reference Regulation No. 30 Section 6(h), dated 11/15/93].*

2. Does not involve a change in any compliance schedule date; and *[Reference Regulation No. 30 Section 6(h), dated 11/15/93].*

3. Does not result in a level of emissions exceeding the emissions allowable under this permit, whether expressed herein as a rate of emissions or in terms of total emissions. *[Reference Regulation No. 30 Section 6(h), dated 11/15/93].*

b. Before making a change under the provisions of Condition 4(a) of this permit, the Owner/Operator shall provide advance written notice to the Department and to the EPA in accordance with Condition 3(c)(2)(iii) of this permit. *[Reference Regulation No. 30 Section 6(h)(1), dated 11/15/93].*

c. The Owner/Operator shall keep records of any change made under Condition 4 of this permit in accordance with Condition 3(b)(2)(iv) of this permit. *[Reference Regulation No. 30 Section 6(h)(1), dated 11/15/93].*

Condition 5. Compliance Schedule

The Company shall submit permit applications pursuant to Regulation 1102 of Delaware's Regulations Governing the Control of Air Pollution for the standby compressors identified in the application AQM 1001Y by no later than 08/31/2008. *[Reference Regulation No. 30 Section 6(c)(3), dated 11/15/93].*

Condition 6. Permit Shield

a. Compliance with the terms and conditions of this permit shall constitute compliance with 7 Del. C. Chapter 60 for the discharge of any air contaminant specifically identified in the permit application as of the day of permit issuance. However, nothing in this permit shield shall in any way limit or affect the following:
   1. The provisions of section 303 (Emergency Orders) of the Act, including the authority of the Administrator under that section; or
   2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
   3. The applicable requirements of the acid rain program consistent with section 408(a) of the Act; or
   4. The ability of EPA to obtain information from a source pursuant to section 114 of the Act. *[Reference Regulation No. 30 Sections 6(f)(4) dated 12/11/0.*

b. The permit shield granted in Condition 6 of this permit shall not extend to any changes made pursuant to Condition 2(m)(3) [Minor Permit Modifications] or Condition 4 [Operational Flexibility] of this permit. *[Reference Regulation No. 30 Sections 6(h)(2) dated 12/11/00, 7(e)(1)(vi) dated 12/11/00, and 7(e)(2)(vi) dated 12/11/00]*

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pc: Dover Title V File
Bruce Steltzer

Revision History:

None.

ATTACHMENT "A"

Initial Evaluation of Operation and Performance of the Coker (FCU) WGS

The procedures described herein provide for the initial evaluation and performance of the FCU WGS spanning a period of 12 months from start up. Start up of the FCU WGS has an effective date of September 30, 2006. These requirements are applicable during the interim period plus an additional 6 months ending March 31, 2008. After the expiration of the 18 month start up period, these procedures will expire and the Owner/Operator must comply with all emissions limitations and all conditions in the Operating permit, even during startup, shutdown and during trips or malfunctions unless the permit is revised in accordance with the following: The Owner/Operator submits to DNREC proposed operating procedures to govern such occurrences that may occur after the 12 month period and DNREC will review these procedures and will incorporate appropriate operating scenarios to govern such instances into this permit. Provided, however, that any incorporated operating scenario governing beyond the 12 month period shall specify that after a time certain the Owner/Operator must effectuate the turndown ratios provided in this Attachment and that after a future time certain the Owner/Operator may not continue to operate the FCU without the pollution control devices so that the FCU must be turned off rather than turned down, and under what circumstances.

Rationale:

The technology incorporated into the WGS has not previously been implemented in any similar application at any other facility in the United States. Accordingly, the Owner/Operator shall perform an enhanced evaluation during the 12 month period following initial operation of the WGS of anticipated variations in the WGS system performance, including any malfunction or other unintended shutdown of the WGS system. Premcor shall investigate the underlying causes of any malfunction, evaluate the effectiveness of various operational practices, and analyze alternative maintenance procedures. The objective of these investigations will be to identify reasonably available maintenance and operating practices that will minimize events resulting in the bypass of the Belco prescrubber and the WGS, and to minimize the duration of any such bypass incidents in the event that they occur. Premcor will implement appropriate corrective action to minimize the duration of any bypass event during these circumstances. In addition, Premcor will continue to implement the turndown matrix provided in this Attachment during this twelve month evaluation period.

Interim Control Measures

The Owner/Operator shall comply with the following interim control measures:

1. The requirements in Conditions 2.1.3, 2.1.5 and 2.2 and Regulations 5, 11 and 14 of the State of Delaware **"Regulations Governing the Control of Air Pollution"** shall not apply during periods of planned start up and planned shut downs of the FCU provided the planned start up and shut down event does not exceed 116 hours. The requirements shall apply to each planned start up or shut down event after the expiration of the 116 hour period. Planned start ups shall be considered a maximum of 116 hours preceding oil back into the unit. Planned shut downs shall be considered a maximum of 116 hours from feed out of the FCU.

2. In the event that the FCU COB and the WGS are shut down, operation of the FCU with the Backup Incinerator shall be in accordance with this Attachment A of this permit subject to the following emission restrictions:

    2.1 Carbon Monoxide combustion shall be achieved at a minimum of 1300°F, and at a minimum retention time of 0.3 second; and

    2.2 Maximum particulate matter emissions of 0.19 grain per dry standard cubic foot *("dscf")* shall be achieved either by operating at a temperature of 1700°F, a minimum excess of 1.9% O_2 and a residence time of 2.0 seconds, or, at such other alternate operating conditions as have been demonstrated by testing to achieve equivalent emissions.

3. At the start of a planned shut down or start up of the FCU COB and WGS, the Owner/Operator shall have a maximum transition time of 4 hours to allow the transfer of gases and heat to or from the FCU Back Up Incinerator, to or from the FCU COB and WGS to reach performance standards. During this transition period, the permit limitations in Conditions 2.2 and 2.4 and Regulations 5, 11 and 14 of the State of Delaware **"Regulations Governing the Control of Air Pollution"** shall not apply.

   If there is an emergency shut down of the FCU COB and the WGS, the Owner/Operator has a maximum of 24 hours, starting from the removal of the FCU COB and the WGS from service, until the FCU off gases must totally enter the FCU Back Up Incinerator and the Owner/Operator must meet the permitted stack emission standards as per the turndown matrix in Table 1 of this permit. During this period (24 hour maximum), the permit limitations stated in Conditions 2.2 and 2.4 and Regulations 5, 11 and 14 of the State of Delaware **"Regulations Governing the Control of Air Pollution"** shall not apply. The 24 hours needed for start up are due to the controlled heat-up increments of the FCU Back Up Incinerator, to prevent spalling of the refractory and firebrick and other possible major damage. If the CO Boiler and Wet Gas Scrubber can be repaired in less than 24 hours, then the back up incinerator does not have to be started up and flue gas may continue to be diverted to the metal bypass stack to allow the CO Boiler and Wet Gas Scrubber to be repaired or restarted.

   If there is an emergency shut down of the FCU COB and WGS, the Owner/Operator may conduct an evaluation of the cause of the shut down. If the Owner/Operator's initial determination is that the FCU COB and WGS can be repaired or restarted in less than 24 hours, then it shall be repaired or restarted, and the Back Up Incinerator need not be started up, the rationale being that each hour produces substantially less pollution. Nonetheless, if the FCU COB and WGS are not restarted and operational during the 24 hour period, the permit conditions and regulations above shall apply after the 24 hour period and emissions in excess of permitted levels after 24 hours will constitute a Permit violation

4 By no later than November 30, 2007 Premcor shall submit to the Department a report describing the individual incidents during which bypasses occurred, the duration of any such bypass and the results of Premcor's investigation into the cause of the bypass event. The report shall also include Premcor's proposal for determining, the circumstances under which an unplanned shutdown of the FCU COB, Belco prescrubber and/or WGS should trigger initiation of procedures to shutdown the FCU. The report shall include a specific proposal describing the maximum duration that the FCU will be allowed to operate in the bypass mode before it is shut down. In determining such maximum duration that the FCU will be allowed to operate in the bypass mode, Premcor shall take into consideration engineering analysis, good air pollution control practices and the outer bounds set by planned start ups and shut downs. The Department will review the report and incorporate appropriate revised operating scenarios in this permit.

Turn Down Matrix

These procedures have been incorporated to restrict the FCU sulfur dioxide (SO_2) emission rate to less than 4,450 lbs/hr during time periods that the FCU COB and WGS are bypassed by implementing the alternate operating scenarios (conditions of start-up, shutdown or malfunctions).

The Owner/Operator shall assess the cause and determine the course of action following unplanned shutdowns and malfunctions of the COB and WGS. If the COB and WGS can be restarted or any necessary repairs can be completed within 12 hours, no rate cuts need be initiated. If the COB and WGS cannot be restarted or if repairs cannot be completed within 12 hours, the rate cuts in Table 1 shall be initiated and implemented. When the FCU feed throughput rate of 31,500 barrels/day is achieved, this rate will be maintained for the duration of the COB and WGS outage. A tabular summary of potential scenarios is provided below in Table 1.

Table 1
Example of DCR FCU SO_2 Emissions
During Implementation of Turndown Matrix

FCU Feed Rate (KBD)	FCU Feed Wt.% S	SO_2 Emissions (lb/hr)
31.5	6.0	4441.5
31.5	5.5	4071.4
31.5	5.0	3701.3
31.5	4.5	3331.1
31.5	4.0	2961.0

ATTACHMENT "B"

Initial Evaluation of Operation and Performance of the FCCU WGS

The procedures described herein provide for the initial evaluation and performance of the FCCU WGS spanning a period of 12 months from start up. Start up of the FCCU WGS has an effective date of December 31, 2006. These requirements are applicable during the interim period plus an additional 6 months ending June 30, 2008. After the expiration of the 18 month start up period, these procedures will expire and the Owner/Operator must comply with all emissions limitations and all conditions in the Operating permit, even during startup, shutdown and during trips or malfunctions unless the permit is revised in accordance with the following: The Owner/Operator submits to DNREC proposed operating procedures to govern such occurrences that may occur after the 12 month period and DNREC will review these procedures and will incorporate appropriate operating scenarios to govern such instances into this permit. Provided, however, that any incorporated operating scenario governing beyond the 12 month period shall specify that after a time certain the Owner/Operator must effectuate the turndown ratios provided in this Attachment and that after a future time certain the Owner/Operator may not continue to operate the FCCU without the pollution control devices so that the FCCU must be turned off rather than turned down, and under what circumstances.

Rationale:

The technology incorporated into the WGS has not previously been implemented in any similar application at any other facility in the United States. Accordingly, the Owner/Operator shall perform an enhanced evaluation during the twelve month period following initial operation of the WGS of anticipated variations in the WGS system performance, including any malfunction or other unintended shutdown of the WGS system. Premcor shall investigate the underlying causes of any malfunction, evaluate the effectiveness of various operational practices, and analyze alternative maintenance procedures. The objective of these investigations will be to identify reasonably available maintenance and operating practices that will minimize events resulting in the bypass of the Belco prescrubber and the WGS, and to minimize the duration of any such bypass incidents in the event that they occur. Premcor will implement appropriate corrective action to minimize the duration of any bypass event during these circumstances. In addition, Premcor will continue to implement the turndown matrix provided in this Attachment during this twelve month evaluation period.

Interim Control Measures

The Owner/Operator shall comply with the following interim control measures:

2. The requirements in Condition 2 and Regulations 5, 11 and 14 of the State of Delaware "**Regulations Governing the Control of Air Pollution**" shall not apply during periods of planned start up and planned shut downs of the FCCU provided the planned start up and shut down event does not exceed 72 hours. The requirements shall apply to each planned start up or shut down event after the expiration of the 72 hour period.

   NOTES:

   a. Start-up of the FCCU begins when feed is first introduced into the reaction section of the Fluid Catalytic Cracking Unit, and the start-up is complete when the FCCU has reached a stable, steady state operation.

   b. Shut-down of the FCCU begins when feed first begins to be reduced to the reaction section of the FCCU and is complete when no feed is entering the FCCU reaction section.

2. Unplanned Start-up and Shutdown of Fluid Catalytic Cracker Unit CO Boiler and Wet Gas Scrubber. In the event that the FCCU COB is to be shut down for a period longer than 24 hours, Premcor shall promptly begin necessary process changes to provide for the complete combustion of carbon monoxide. Full CO combustion operation shall be achieved within 24 hours.

If there is an emergency shutdown of the FCCU CO Boiler and WGS due to upsets or malfunctions, the refinery will take the following steps:

- Immediately begin the necessary process changes to allow for the complete combustion of carbon monoxide in the regenerator; and

- FCCU throughput and operating conditions will be safely adjusted as necessary (see FCCU Turndown Factor below) to allow full CO combustion operation to be achieved within 24 hours of attainment of appropriate operating conditions.

During this period (24 hours maximum), the requirements in Condition 2 and Regulations 5, 11 and 14 of the State of Delaware **"Regulations Governing the Control of Air Pollution"** shall not apply.

If there is an unplanned or emergency shutdown of the FCCU CO Boiler and the Wet Gas Scrubber system, the refinery will conduct an evaluation of the cause of the shutdown. If the CO Boiler and Wet Gas Scrubber can be repaired in less than 24 hours, then the regenerator flue gas may continue to be diverted to the metal bypass stack to allow the CO Boiler and Wet Gas Scrubber to be repaired or restarted, and combustion promoter need not be added. It is recognized that up to 10 days may be required to shutdown CO combustion operation and return to conventional regeneration once CO promoter is introduced into the regenerator. Until the FCCU CO boiler and WGS are returned to normal operation, in order to minimize FCCU emissions, the FCCU feed rate will be reduced to the minimum operating rate as described in the FCCU Turndown Factor below.

3. By no later than February 29, 2008, Premcor shall submit to the Department a report describing the individual incidents during which bypasses occurred, the duration of any such bypass and the results of Premcor's investigation into the cause of the bypass event. The report shall also include Premcor's proposal for determining, the circumstances under which an unplanned shutdown of the FCCU COB, Belco prescrubber and WGS should trigger initiation of procedures to shutdown the FCCU. The report shall include a specific proposal describing the maximum duration that the FCCU will be allowed to operate in the bypass mode before it is shut down. In determining such maximum duration that the FCCU will be allowed to operate in the bypass mode, Premcor shall take into consideration engineering analysis, good air pollution control practices and the outer bounds set by planned start ups and shut downs. The Department will review the report and incorporate appropriate revised operating scenarios in this permit.

FCCU Turn Down Factor

These procedures have been incorporated to minimize FCCU emissions during time periods that the FCCU COB and WGS are bypassed due to alternate operating scenarios (conditions of start-up, shutdown or malfunctions).

1. If the Owner/Operator's initial assessment indicates that the FCCU CO Boiler and WGS can be returned to service within 24 hours after the unplanned shutdown or emergency shutdown, then no rate cuts will be initiated and combustion promoter need not be added. The FCCU may continue to operate until the CO boiler and WGS are restarted.

2. If the Owner/Operator's initial assessment indicates that the FCCU CO Boiler and WGS cannot be returned to service within 24 hours after the unplanned or emergency shutdown, the Owner/Operator shall take the following actions:

    a. The Owner/Operator will promptly begin to reduce the FCCU feed rate at a rate of 5,000 bph until the unit is operating at 55,000 bpd; and

b. Combustion promoter will be added to the FCCU regenerator when appropriate operating conditions have been achieved. Fully promoted (complete) combustion will be achieved within 24 hours of the start of the unplanned or emergency shutdown; and

c. It is recognized that up to ten days may be required to shutdown CO combustion-promoted burn and return the FCCU regenerator to conventional regeneration; and

d. Once full burn operation is achieved, the FCCU will continue to operate at no more than 55,000 bpd until the CO boiler and WGS are returned to normal operation.

ATTACHMENT "C"

AQM-1001CC/Group 1 Insignificant Activities

Insignificant Activity/Description	Basis [1]	Insignificant Activity Details
Air contaminant detectors, Air contaminant recorders, combustion controllers and combustion shut-offs	(a)	No applicable federal or state requirement(s), hence no list required nor available.
Fuel-burning equipment which uses any fuel and has a rated heat input of less than 15 million BTUs per hour	(b)(1)	The stationary fuel burning sources less than 15 MMBtu/hr are included in AQM-1001A. Insignificant fuel burning activities not listed include: cooking fires, building HVAC, portable space heaters, portable igniters, etc. There are no applicable federal or state requirement(s), hence no list is required or available.
Internal Combustion Engine that Drives Compressors	(b)(2)	Internal combustion engines used to drive compressors are listed in the "Initial Compliance Certification" dated 01/24/94 for NOx RACT (see Appendix G). All equipment, if any, meeting this definition were deemed to be exempt.
Internal Combustion Engine that Drives Generators	(b)(2)	Internal combustion engines used to drive generators are listed in the "Initial Compliance Certification" dated 01/24/94 for NOx RACT (see Appendix G). All equipment, if any, meeting this definition were deemed to be exempt.
Internal Combustion Engine that Drives Water Pumps	(b)(2)	Internal combustion engines used to drive water pumps are listed in the "Initial Compliance Certification" dated 01/24/94 for NOx RACT (see Appendix G). All equipment, if any, meeting this definition were deemed to be exempt.
Internal Combustion Engine that Drives Other Auxiliary Equipment During Emergency or Standby Operations	(b)(2)	Internal combustion engines used to drive other auxilary equipment are listed in the "Initial Compliance Certification" dated 01/24/94 for NOx RACT (see Appendix G). All equipment, if any, meeting this definition were deemed to be exempt.
Air Conditioning and Comfort Ventilating Systems	(c)	No applicable federal or state requirement(s), hence no list required nor available.

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Insignificant Activity/Description	Basis [1]	Insignificant Activity Details
Vacuum Cleaning Systems Used Exclusively for Office Applications	(d)	No applicable federal or state requirement(s), hence no list required nor available.
Ventilating or Exhaust Systems for Print Storage Room Cabinets	(e)	No applicable federal or state requirement(s), hence no list required nor available.
Exhaust System for Controlling Steam and Heat	(f)	No applicable federal or state requirement(s), hence no list required nor available.
Laboratories that conduct chemical or physical analysis or determination of product quality and commercial acceptance (not part of production process)	(g)	Laboratory constructed in 1956 and is exempt per DNREC Regulation No. 2; no applicable federal or state requirement(s), hence no additional information is required nor available.
Internal Combustion Engines and Vehicles Used for the transport of passengers or freight	(h)	No applicable federal or state requirement(s), hence no list required nor available.
Maintenance, repair or replacement-in-kind or equipment for which a permit to operate has been issued	(j)	This is merely an activity, hence no list required nor available.
Equipment which only emits elemental nitrogen, oxygen, carbon dioxide and/or water vapor	(k)	No applicable federal or state requirement(s), hence no list required nor available.

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Insignificant Activity/Description	Basis [1]	Insignificant Activity Details
Ventilating and Exhaust Systems used in cafeterias and eating facilities	(l)	No applicable federal or state requirement(s), hence no list required nor available.
Equipment used to liquefy or separate oxygen, nitrogen or the rare gases from the air	(m)	No applicable federal or state requirement(s), hence no list required nor available.
Outdoor painting and sandblasting equipment	(p)	No applicable federal or state requirement(s), hence no list required nor available.
Lawn mowers, tractors, farm equipment and construction equipment	(q)	No applicable federal or state requirement(s), hence no list required nor available.
Any activity related to routine maintenance and repair of a facility where emissions would not be associated with a primary production process of the facility. Such activities may include	(s)	No applicable federal or state requirement(s), hence no list required nor available.
Cleaning	(s)(i)	No applicable federal or state requirement(s), hence no list required nor available.
Solvent Use	(s)(ii)	No applicable federal or state requirement(s), hence no list required nor available.

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Insignificant Activity/Description	Basis [1]	Insignificant Activity Details
Steam Cleaning	(s)(iii)	No applicable federal or state requirement(s), hence no list required nor available.
Painting	(s)(iv)	No applicable federal or state requirement(s), hence no list required nor available.
Degreasing	(s)(v)	No applicable federal or state requirement(s), hence no list required nor available.
Washing	(s)(vi)	No applicable federal or state requirement(s), hence no list required nor available.
Welding	(s)(vii)	No applicable federal or state requirement(s), hence no list required nor available.
Vacuuming	(s)(viii)	No applicable federal or state requirement(s), hence no list required nor available.
Coating	(s)(ix)	No applicable federal or state requirement(s), hence no list required nor available.

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Insignificant Activity/Description	Basis [1]	Insignificant Activity Details
Sweeping	(s)(x)	No applicable federal or state requirement(s), hence no list required nor available.
Abrasive Use	(s)(xi)	No applicable federal or state requirement(s), hence no list required nor available.
Insulation Removal	(s)(xii)	No applicable federal or state requirement(s), hence no list required nor available.
Fire schools or fire fighting training	(t)	No applicable federal or state requirement(s), hence no list required nor available.
Buildings, cabinets and facilities used for storage of chemicals in closed containers	(u)	No applicable federal or state requirement(s), hence no list required nor available.
Gasoline storage tanks that have a capacity less than 2,000 gallons and that were constructed after January 1, 1979	(v)(ii)	See either custom Form AQM-1001CC/Group 2 list or custom Form AQM-1001CC/Group 2 detail sheet(s).
Gasoline storage tanks that have a capacity less than 250 gallons and that were constructed after December 31, 1978	(v)(iii)	See either custom Form AQM-1001CC/Group 2 list or custom Form AQM-1001CC/Group 2 detail sheet(s).

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Insignificant Activity/Description	Basis [1]	Insignificant Activity Details
Diesel and fuel oil storage tanks with a capacity of 40,000 gallons or less	(w)	See either custom Form AQM-1001CC/Group 2 list or custom Form AQM-1001CC/Group 2 detail sheet(s).
Gasoline and diesel fuel dispensing systems that never exceed a monthly throughput of 10,000 gallons	(x)	See either custom Form AQM-1001CC/Group 2 list or custom Form AQM-1001CC/Group 2 detail sheet(s).
Inorganic acid storage tanks equipped with an emission control device	(z)	See either custom Form AQM-1001CC/Group 2 list or custom Form AQM-1001CC/Group 2 detail sheet(s).
Sewage treatment facilities	(aa)	See custom Form AQM-1001B for Unit 10 Waste water Treating Unit.
Water treatment units	(bb)	See custom Form AQM-1001B for Unit 10 Waste water Treating Unit.
Quiescent wastewater treatment operations	(cc)	See custom Form AQM-1001B for Unit 10 Waste water Treating Unit.
Non-contact water cooling towers	(dd)	See custom Form AQM-1001B for cooling tower sources

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Insignificant Activity/Description	Basis [1]	Insignificant Activity Details
Laundry dryers, extractors, or tumblers used for fabrics cleaned with a water solution of bleach or detergents	(ee)	No applicable federal or state requirement(s), hence no list required nor available.
Equipment used for hydraulic testing or hydrostatic testing	(ff)	No applicable federal or state requirement(s), hence no list required nor available.
Blueprint copiers or photographic processes	(gg)	No applicable federal or state requirement(s), hence no list required nor available.

NOTE [1]: Basis codes refer to items in Delaware Regulation 30, Appendix A, Insignificant Activities List.

ATTACHMENT "C"

AQM-1001CC/Group 2-Insignificant Activities

Source (Activity/Equipment Description)	Pollutant	CAS Number	Potential to Emit Emission Rate	Basis [1]	Insignificant Activity PTE Threshold [2]	Source Details
Motor Vehicle Diesel Loading	VOC	N/A	<25 TPY	a	25 TPY	See exemption for throughput < 10, 000 gallons / month in Regulation 30 Appendix A section (x).
Motor Vehicle Gasoline Loading	VOC	8006-61-9	<25 TPY	a	25 TPY	See exemption for throughput < 10, 000 gallons / month in Regulation 30 Appendix A section (x).
WWTP Wet Oil Sludge Loading	VOC	N/A	<25 TPY	a	25 TPY	See emission calculation on detail sheet AQM-1001CC/Group 2 - Calculation.
Ammonia Unloading	NH_3	7664-41-7	<25 TPY	a	N/A [3]	The regulated air contaminant is in an enclosed system; emissions are negligible.
Ammonia Storage Tank 417-TP-M Used for Ph Control at Crude Unit	Ammonia	7664-41-7	<10 TPY	a	N/A [3]	The regulated air contaminant is in an enclosed system; emissions are negligible.
Ammonia-Mobile Trailers (Hydrocracker and other Units)	Ammonia	7664-41-7	<10 TPY	a	N/A [3]	The regulated air contaminant is in an enclosed system; emissions are negligible.
Fuel Oil/Diesel Loading	VOC	N/A	<25 TPY	a	25 TPY	See exemption for throughput < 10, 000 gallons / month in Regulation 30 Appendix A section (x). No toluene loading here.

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Source (Activity/Equipment Description)	Pollutant	CAS Number	Potential to Emit Emission Rate	Basis [1]	Insignificant Activity PTE Threshold [2]	Source Details
Decant/Heavy Oil Loading	VOC	N/A	<25 TPY	a	25 TPY	See emission calculation on detail sheet AQM-1001CC/Group 2 - Calculation.
Propane Loading	VOC	N/A	<25 TPY	a	25 TPY	The regulated air contaminant is in an enclosed system; emissions are negligible.
Glycol Water Reservoir D-38	VOC	N/A	<25 TPY	a	25 TPY	There are negligible emissions of any regulated air contaminant.
Sulfuric Acid Loading	SO_2/H_2SO_4	7446-09-05	<25 TPY	a	25 TPY	There are negligible emissions of the listed regulated air pollutant.
Vent Boxes for Cooling Water System	VOC	N/A	<25 TPY	a	25 TPY	There are negligible emissions of the listed regulated air pollutant.
Boiler Feedwater Chemical Storage Tanks	VOC	N/A	<25 TPY	a	25 TPY	There are negligible emissions of the listed regulated air pollutant.
LUB Oil Units/Systems	VOC	N/A	<25 TPY	a	25 TPY	There are negligible emissions of the listed regulated air pollutant.
Small Unit Tanks used for Raw Materials, Additives, Reagents and Intermediates with a capacity less than 40,000 gallons	VOC	N/A	<25 TPY	a	25 TPY	See detail sheet "AQM-1001CC/Group 2 Insignificant Activities Detail Sheet Small Unit Tanks Used for Raw Materials, Additives, Reagents and Intermediates"

ATTACHMENT "C"

Source (Activity/Equipment Description)	Pollutant	CAS Number	Potential to Emit Emission Rate	Basis [1]	Insignificant Activity PTE Threshold [2]	Source Details
FCCU Catalyst System	PM	N/A	<100 TPY	a	100TPY	See emission calculation on detail sheet AQM-1001CC/Group 2 - Calculation.
Cooling Water Supply Pumps	VOC	N/A	<25 TPY	a	25 TPY	There are negligible emissions of the listed regulated air pollutant.

NOTE [1]: Bases for Determinations are as follows:
(a) = potential to emit emissions rate is below threshold for insignificant activities emissions.

NOTE [2]: Insignificant Activity PTE threshold based on Delaware Regulation No. 30, Appendix A, for Emission Units for which an applicable requirement has not yet been promulgated and which are not elsewhere listed as an insignificant activity.

NOTE [3]: No Insignificant Activity PTE Threshold Established.

NOTE [4]: This source was formerly named "Toluene Loading".

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pc: Dover Title V File
Bruce Steltzer